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DISCOVERY PROCEDURES IN TAGMEMIC RHETORIC: AN EXERCISE IN PROBLEM SOLVING[1]

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One component of a new theory of rhetoric based on the principles of tagmemic linguistics is a discovery procedure for solving ill-defined problems. To be useful in rhetoric, the procedure must be applicable to widely differing kinds of problematic data. Its range of application, however, has only begun to be explored. Particularly important to its use in the classroom is its ability to aid in the solution of problems of literary analysis. One such problem, the discovery and statement of "theme," can be solved by means of three complementary lines of inquiry which constitute part of the tagmemic procedure. Analyses of the sequential and categorical systems in a literary text provide the basis for discovery of a third system--a network of intersecting categories which constitutes a statement of theme. Other systemic problems lend themselves to this approach.

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Preface

Classical rhetoric, the theory and pedagogical methods developed principally by Aristotle, Cicero, and Quintilian, occupied a central position, at times the central position, in higher education from ancient Greece through the eighteenth century, after which its influence declined rapidly. Its goal was to give the student control over the entire process of speaking, from the discovery of arguments in support of propositions to the presentation of the speech. During the nineteenth century, classical rhetoric was replaced by what has been called the "current-traditional" approach to composition (Fogarty, 1959), an eclectic, rather pragmatic method concerned chiefly with problems of style and usage. Although other approaches are used in various English departments (e.g., approaches based on the imitation of models, on case studies, and on semantic theory), the "current-traditional" approach continues to dominate composition programs throughout the country.

It is an understatement to say that present approaches have been unsuccessful. The discipline of rhetoric has deteriorated to such a state that I. A. Richards could characterize it as "the dreariest and least

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profitable part of the waste that the unfortunate travel through in Freshman English" (1936, p. 3). And Albert Kitzhaber, in his elaborate survey of composition courses, confirms Richards' judgment when he speaks of the "widespread uncertainty about aims, a bewildering variety of content, [and] a frequent lack of progression in the course" (1963, p. 10). "Freshman English in the nation's colleges and universities," he concludes, "is now so confused, so clearly in need of radical and sweeping reforms, that college English departments can continue to ignore the situation only at their increasing peril" (p. 26).

Although many English departments have been reluctant to change in spite of the widespread dissatisfaction with current approaches, two trends are apparent. One is to phase out freshman composition--a wholly non-adaptive response to the problem. The other, growing in part out of a recognition that ignoring the problems of approximately one and a half million freshmen every year will not eliminate the problems, is to develop more sophisticated approaches (Fogarty, 1959). It is as a part of this second trend that one may view the effort of Pike, Becker and Young to develop both a theory of rhetoric and a text based on the principles of tagmemic linguistics (Pike, 1964a; Young & Becker, 1965).

Like classical rhetoric, tagmemic rhetoric seeks to provide the writer with a theory of rhetoric and to give him control over the entire process of communication, although the emphasis is on writing rather than speaking. To date, extensive research on theory and methods has been carried out only on the paragraph (Becker, 1965; 1966; 1967, Becker & Young, 1966; Koen, Becker, & Young, in press). However, a second line of research just begun has as its goal an alternative to classical invention (a highly sophisticated heuristic procedure whose function was to facilitate the discovery of arguments in support of a proposition). One important feature of tagmemic linguistics is a discovery procedure designed to aid linguists in the analysis of languages which as yet have no alphabet and no written grammar or dictionary (Elson & Pickett, 1962; Longacre, 1964; Pike, 1967). An effort is now being made to modify this procedure for rhetorical purposes (English, 1964; Pike, 1964b; Young & Becker, 1965), the goal being an ordered set of heuristic probes, or lines of inquiry, somewhat comparable to classical invention but more economical and systematic and with a wider range of application.

Increasingly, rhetorical theorists are becoming interested in what is called the "pre-writing" stage of the writing process (Lauer, 1967; Rohman, 1965), the stage in which one discovers systems or generalizations that constitute new insights into problematic data. "Traditional approaches to the writing process are ...inadequate," argue Rohman and Wlecke (1964, p. 20), "if they fail to take account of the radically perspectival nature of writing. Typically such approaches stress only the virtues of hindsight--the 'rhetoric of the finished word'--without giving attention to the primary necessity of insight--the stage of discovery in shaping experience into perspective." It is probably something more than historical accident that the past 25 years have also seen a surge of interest among psychologists in the phenomena of creativity, concept formation, thinking, and problem solving. These complementary developments in rhetoric and psychology, coupled with the already well-developed discovery procedures of tagmemic linguistics, offer both a motivation and a basis for reestablishing invention as a significant component of modern rhetoric.

One crucial assumption underlying the use of the tagmemic procedure in rhetoric is that its application is not limited to linguistic data. It is assumed to be sufficiently general to be applied to any ill-defined problem. It has already been applied to problems in anthropology (Bock, 1964) and folk-lore (Dundes, 1962); and certain components of the model have been found relevant to psychotherapy (Scheflen, in press). Furthermore, Pike (1964b; 1965) and Howes (1964) have suggested it as a means for approaching problems of literary criticism. This is a particularly important development, since rhetoric courses are now staffed almost exclusively by people trained in literature, and they tend to teach what they have been taught. Of the 95 schools studied by Kitzhaber (1963), one-fifth used literary texts as a basis for writing assignments in first-semester composition; in the second semester, the number jumped to two-thirds. But the discussions by Pike and Howes are general and tentative. As a way of further demonstrating the procedure's range of application, and in particular its application in literary analysis, the procedure is applied in the following study to a fundamental and persistent problem in literary criticism.

The Problem of Theme in Fictional Literature

"The process of academic criticism," remarks Northrup Frye, "begins ...with reading a poem [or any other work of fiction] through to the end.... Once the end is reached, we can see the whole design of the work as a unity. It is now a simultaneous pattern radiating out from a center, not a narrative moving in time. The structure is what we call the theme, and identifying the theme is the next step. By 'identifying' a theme I do not mean spotting it: the theme is not something in the poem, much less a moral precept suggested by it, but the structural principle of the poem" (1963, p. 65). Wallace Stegner presents a similar view in his discussion of the relation of ideas to the fictional work: "The ideas, the generalizations, ought to be implicit in the selection and arrangement of the people and places and actions. They ought to haunt a piece of fiction..." (1950, p. 10). Stegner's metaphor is interesting, for it emphasizes the strangely elusive nature of fictional theme. It is not, in non-didactic fiction at least, an explicit statement to be found in the text, nor is it an unstated ethical concept which the work illustrates. It is, as Frye points out, a non-temporal system of semantic units and their relationships--a semantic field.[2]

But the perception of theme is not so inevitable as Frye's statement suggests; it is often difficult to perceive, and when perceived, difficult to describe without distortion. Every reader has had the experience of understanding all the parts of a literary work and yet not understanding the whole. The linguistic features--the vocabulary, syntax, etc.--may be familiar; he can paraphrase it with no difficulty, summarize the plot, describe the characters and setting. And yet he may still feel that something essential remains to be apprehended. It is possible to know about a work and yet not know it in some deeper sense. The experience is common enough, so common that we seldom give it much thought. Nevertheless, the ability to discover and state a literary theme is of great importance to both the teacher and the serious reader of literature.

The difficulty arises not from critical ineptitude but from the nature of the literary work as a complex system. "Complex system" here refers to a unified system composed of numerous parts which interact in a non-simple way. A biological cell is a complex system, a column of figures to be added is not. When we say that a literary work is more than the sum of its parts,

we are saying that "given the properties of its parts and the laws of their interaction, it is not a trivial matter to infer the properties of the whole" (Simon, 1962, p. 468). The parts often do not seem to "add up" to a meaningful whole because they are not additive: they relate in more subtle and elusive ways. Understanding theme, and in some sense the meaning of the work as a whole, presupposes the perception of the structural principle which relates the parts. And this is no trivial matter: the reader either grasps it by an act of imagination or not at all. The ghost which haunts a work may be real but it is invisible.

But even when he does apprehend the theme of a work, the reader finds himself in a position similar to that of the religious mystic, who cannot communicate his experience nor how he achieved it. Undistorted articulation is difficult, for discursive language is unilinear, whereas what must be described is multilinear. As C. S. Lewis points out,

> Some things it [language] communicates so badly that we never attempt to communicate them by words if any other medium is available. Those who think they are testing a boy's "elementary" command of English by asking him to describe in words how one ties one's tie or what a pair of scissors is like are far astray. For precisely what language can hardly do at all, and never does well, is to inform us about complex physical shapes and movements. Hence we never in real life voluntarily use language for this purpose; we draw a diagram or go through pantomimic gestures (1960, p. 214).

A semantic field with units related simultaneously along several dimensions is quite as difficult to describe as a complex physical shape or movement. The following passage by two American critics illustrates the difficulty. They are discussing Shirley Jackson's story "The Lottery," in which a woman is stoned to death in an annual harvest ritual.

> "The Lottery" makes such points as these: the cruel stoning is carried out by "decent" citizens who in many other respects show themselves kind and thoughtful. The cruel act is kept from seeming the cruel thing it is by the fact that it has been sanctioned by custom and long tradition. When Mrs. Adams remarks that "Some places have already quit lotteries," Old Man Warner says, "Nothing but trouble in <u>that</u>. Pack of young fools." A further point is this: human beings find it difficult to become exercised over ills not their own. Once a family group sees that the victim is not to be selected from among themselves, they proceed to observe matters with a certain callous disinterest. Moreover, even the individual members of the Hutchinson family are themselves relatively unconcerned once each discovers that he is not the victim chosen. Thus, "Nancy

> and Bill, Jr., opened theirs at the same time, and both beamed and laughed, turning round to the crowd and holding their slips of paper above their heads." The French moralist Rochefoucald ruefully observed that we obtain a certain pleasure from news of misfortune to friends. There is truth in this, and our story savagely makes a related point. Only the victim protests "It isn't fair," and she makes her protest only after she has chosen a slip of paper with the black spot. We remember that earlier Mrs. Hutchinson had said to Mrs. Delacroix in neighborly good humor, "Clean forgot what day it was," and both had "laughed softly" together.
>
> "The Lottery," then, deals indeed with live issues relevant to our time. If we hesitate to specify a particular "point" that the story makes, it is not because the story is vague and fuzzy, but rather because its web of observations about human nature is too subtle and too complex to be stated in one or two brief maxims (Brooks & Warren, 1959, p. 75).

The list of meanings itself, as well as the hesitation of the critics, implies a recognition of the work's semantic complexity, but it fails to reveal the interdependence among the meanings; and it certainly fails to exhaust them. Reducing the theme of a work to a single maxim is even less satisfactory than listing several meanings, for it ignores both the complexity of the work and its uniqueness. Reducing the theme of Shakespeare's Romeo and Juliet to the truism that the course of true love never did run smooth makes it impossible to distinguish the meaning of this play from, say, Keller's Romeo und Julia auf dem Dorfe or Tristan and Iseult, even though their impact on the reader is radically different. Ghosts, after all, are ghosts of some body. Furthermore, both methods appear to assign meanings arbitrarily; neither, typically, offers an account of how the meanings are determined.

The Role of Field Analysis

There are no mechanical procedures which lead to the discovery of a theme, nothing like the rules of addition, which guide one infallibly, without the aid of intuition, to the correct solution of an arithmetic problem. But this does not imply that the reader's sole alternative is trial-and-error search guided only by his experience and imagination. It is possible to devise heuristic procedures, i.e., systematic discovery procedures, which enable deliberate, conscious exploration of a literary work. These procedures are not mechanical, for their effective use requires intuitive leaps as well as conscious step-by-step

analysis. One procedure with considerable promise is, as we have suggested, the tagmemic discovery procedure (Pike, 1964b; 1965).

The nature of thematic problems suggests the special relevance of what in tagmemics is called a "field perspective," a conceptual emphasis on systems of relationships. For a failure to perceive theme appears to arise from a failure to perceive the parts of the literary work as functioning in a particular kind of system. Tagmemic theory assumes that a unit's distribution in larger contexts is essential to an adequate description of the unit. More specifically, an adequate description of any unit of human behavior (syntactic, lexical, phonological, social, philosophical) includes as one of its components the unit's distribution in a class, in a sequence of hierarchically-ordered events, and in a network of contrastive vectors of a matrix. Unless the parts of a work are seen as functioning in larger complementary systems, they cannot be adequately understood. (Hence the notion presented earlier that one may understand the parts of a literary work without understanding the whole seems questionable.)

What I would like to argue is that a field analysis, which assigns literary units to three interdependent systems (class, sequence, and matrix), will not only lead to an elucidation of the conventional elements of motif and plot but will provide insight into theme as well.

The Method Illustrated

An analysis of all three systems in Isaac Babel's "Crossing into Poland" will illustrate this approach to a literary work.[3] Although the story's theme is my principal concern, some discussion of plot and motif is necessary since the systems are interdependent. The plot, which here means the temporal ordering of the units of the work, can be readily segmented into stages, although there may be some disagreement about the precise boundaries (since they typically blur into one another). The ability to analyze plot seems to depend in large part upon the perception of (a) an abstract underlying pattern which may be shared by numerous literary works, such as the pattern of fairy tales described by Propp (1958), and (b) the perception of mutually reinforcing linguistic cues: sequence markers; shifts in dramatic personae (in actors, location, time, manner, instrument, etc.); shifts in grammatical focus, where a lexical chain moves out of one grammatical position into another; shifts from direct to indirect discourse; shifts in tense,

and so on. The initial segmentation appears to be intuitive; then one looks for confirmation and refinements by a close study of linguistic cues.

Like most plots, the plot of Babel's story is hierarchically structured. It can be segmented initially into two parts: the first two paragraphs constitute a single, high-level semantic unit, presenting events related to the Russian army's advance into Poland; the remaining seven paragraphs constitute a second unit, presenting events which occur in the house where the narrator, a Russian soldier, is billeted. Although the first unit can be regarded as a single, coherent episode, the second is a sequence of three loosely connected sub-units, each of which constitutes a separate episode: (a) a description of the cluttered room and the Jews who occupy it (paragraphs 3, 4, 5), (b) the narrator's dream, in which the Brigade Commander is executed, apparently for cowardice (paragraph 6), and (c) the woman's account of her father's execution and his concern for her at the moment of death (paragraphs 7, 8, 9). Each of the episodes is strongly cued by abrupt shifts in scene, time, act and action. At this level of the hierarchy, the plot can be summarized formulistically as A (B, C (d, e, f)). Further segmentation is, of course, possible since all the episodes are composed of isolatable events. The decision to focus attention at one level of the hierarchy rather than another is always somewhat arbitrary, although not entirely so. If the total action of the story is being studied, the appropriate units for consideration are likely to be high-level ones. Low-level units, such as the sentence, are not significant units in plot analysis any more than morphemes or tagmemes would be in the analysis of paragraphs. But the final test of appropriateness is pragmatic: does the unit allow one to proceed in the analysis? Is it useful?

The parts of a fictional work can also be redistributed in semantic classes. Fictional works are intricately patterned and highly redundant systems; units at all levels subtly echo and re-echo through the work as repetitions, contrasts, and analogies. As Gerard Manley Hopkins observed, "the artificial part of poetry, perhaps we shall be right to say all artifice, reduces itself to the principle of parallelism."[4] Units perceived as somehow parallel can be grouped into classes, which then become significant conceptual entities in their own right. The effect of such classification is to render the text generic, a necessary step toward understanding the whole.

Here, however, the analyst is on uncertain ground; for as Jacobson points out, artistic prose--"where parallelisms are not so strictly marked and strictly

regular as continuous parallelism [in verse] and where there is no dominant figure of sound--presents more entangled problems for poetics...." (1968, p. 374). Nevertheless, readers do tend to agree on what constitute parallel units in a text. At the moment our intuitive ability greatly exceeds our analytic ability.

Classifying the episodes of the plot on the basis of shared features is a much simpler task than classifying units at a lower-level, where one finds a bewildering web of recurrences.[5] The first two episodes can be grouped together since they are contrastive descriptions of scenes, as can 3 and 4, since the two executions constitute analogous acts.

The episodes can also be reclassified on the basis of other features. Episode 4 can be grouped with 1 since the acts of both the father and the troops are presented in heroic terms, and episode 3 can be grouped with 2 since the acts of the Brigade Commander and the Jews are, roughly speaking, cowardly. Furthermore, episodes 4 and 2 can be grouped, since the principal actors in both are Jews, as can 1 and 3, where the principal actors are soldiers. Even when attention is focused on high-level units, the complexity of the categorical relations constantly threatens to swamp efforts to see the work clearly and whole. Nevertheless, certain relationships begin to emerge which bring the reader closer toward the perception of a "structural principal" which can organize the parts into a meaningful whole.

Both the sequential and class systems provide clues to a third system which is our chief concern--a network of intersecting categories of semantic units which constitute a statement of literary theme. None of these systems is completely independent of the other. As has already been suggested, the four episodes of the plot of Babel's story can be treated as parallel units and reordered into classes. The two systems, then, are mutually reenforcing; insight into one tends to give insight into the other. And so with the third system as well.

On the basis of clues provided by such analyses, the units can be re-ordered once again, this time in a matrix which reflects features of both the sequential and class systems. The result is a deceptively simple array whose dimensions are determined by the epistemological and axiological distinctions underlying the narrator's account of his experience and whose cells are filled by the previously isolated high-level units:

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Act \ Scene	heroic	non-heroic
heroic — active	I Episode 1 (Russian advance)	II
heroic — passive		Episode 4 (Father's execution)
non-heroic — active	III Episode 3 (Commander's execution)	IV
non-heroic — passive		Episode 2 (Behavior of the Jews)

In spite of the numerous clues available at this stage of the analytical process, constructing a matrix usually involves some trial-and-error activity. Typically, several possible matrices are devised and discarded before inventing one which seems adequate; a series of increasingly intelligent mistakes leads toward an insight which can integrate the parts into a meaningful whole. The matrix is a statement of the theme, and matrix analysis is the means by which it is discovered.

Each of the rows and columns joins episodes along one dimension (scene) and contrasts them along another (act), thus providing a systematic way of displaying the pervasive likenesses and differences which were revealed earlier in the classification. Adding another dimension to the rows by dividing them into active and passive is a way of presenting the qualitative differences between similar acts. There is a difference between cowardice and servility, just as there is a difference between the aggressive, destructive courage of a soldier and the "passive" courage of a Christ or a Martin Luther King. The diagonal cells also reveal significant relationships. The narrator's descriptions of the troops and the Jews suggests a strong bias in favor of the one and against the other--Cossack and Jew are in his value system poles apart. But two experiences, represented in the other diagonal, are incompatible with this system: the first, the brigade commander's retreat, and the second, the selfless courage of the father. The narrator is being forced into a much more complex image of the world; the categories by which he organized experience are no longer adequate to account for all his experiences.

If a literary work is more than the sum of its parts, it is also, in a curious way, less than the sum. The larger the number of separate units one tries to deal with, the more bewildering the number of connections between them and the less easy it is to develop a sense of the whole. Understanding requires reduction to some simpler and deeper order. Such simplification is possible because of the hierarchical and redundant structuring typical of fictional literature. Learning to simplify involves learning to view the parts of a text as members of higher-level, more abstract units functioning in systems. The heuristic procedure we have been discussing can be extremely helpful to both the reader and the teacher of literature in guiding this process, for it can help them to avoid drifting into irrelevancies and to discover the regularities and relationships which permeate the work. Without losing sight of particulars, one is able to move consciously and deliberately toward a generic, systemic conception of the literary work.

I do not mean to imply, however, that every reader actually constructs a matrix in his mind whenever he apprehends the theme of a literary work, although it is probably true that the semantic field which evolves in his mind results from perceiving many of the same cues that are used to construct matrices. A matrix is a way of representing a subtle, more complicated and probably less sharply defined field system in the reader's mind, in much the same way that a weather map represents meteorological phenomena. What is important for both reader and teacher is that matrix analysis offers a way of encouraging the intuition of theme, of coaxing the imaginative act.

A matrix, like the other systems one constructs when analyzing a work of fiction, arises out of an interaction between reader and text; and because of this there are likely to be differences in the matrices constructed by different readers. We cannot speak of a correct matrix, as we can of a correct answer to an arithmetic problem, for a matrix is an interpretive act which is to some extent influenced by the unique knowledge, values, and biases of the reader. He inevitably adds something of himself to the data. On the other hand, we can speak of more or less reasonable matrices, for what can reasonably be said about a text is to a large extent constrained by the features of the text.

Precisely how one evaluates a matrix is not clear, but certain standards do seem appropriate. A reasonable matrix ought to account in one way or another for all features of the text perceived as significant. It should also

probably be consistent with other relevant information one has about the text, about other works by the author, and about the author himself. It is known, for example, that Babel himself experienced a conflict between the values of his Jewish heritage and those of a Communist officer in a Cossack regiment; and the conflict appears in a number of his works, as in this passage from "The Rabbi's Son":

> His things were strewn about pell-mell--mandates of the propagandist and notebooks of the Jewish poet, the portraits of Lenin and Maimonides lay side by side, the knotted iron of Lenin's skull beside the dull silk of the portraits of Maimonides. A lock of woman's hair lay in a book, the Resolutions of the Party's Sixth Congress, and the margins of Communist leaflets were crowded with crooked lines of ancient Hebrew verse. They fell upon me in a mean and depressing rain--pages of the Song of Songs and revolver cartridges (1955, pp. 192-193).

Such information tends to confirm certain matrices and discourage others. A reasonable matrix also has characteristic formal features. Its structure, as we have already seen, complements the class and sequential systems by integrating the units and relationships in these systems into an array which provides another basic perspective on the text. And a really elegant matrix does this simply and easily.

A concern for the quality of a particular matrix should not, however, obscure the principal function of matrix analysis--which is to encourage a special sort of understanding of the text. It is the process of inquiry, not a particular product, which is of primary importance here. And even a poorly constructed matrix may trigger the desired insight. Once it has occurred, constructing a more adequate matrix is a simple task. A reasonable matrix can be taken as evidence that the reader has arrived at an understanding of the theme of the work.

In addition to offering a heuristic procedure for discovering theme, matrix analysis also offers a means for stating it. It provides an alternative to an unintegrated list of generalizations or to a reduction of the work to a simple maxim. Unusual as it is to conceive of theme in diagramatic terms, a matrix does offer a way of displaying the "structural principle" the reader intuitively grasps, while avoiding the losses which inevitably accompany the use of discursive language. Stating a theme in terms of a matrix is also less arbitrary since one can explain how he developed it. The statement is thus more susceptible to careful scrutiny and evaluation.

It is possible to derive a list of generalizations from a matrix, and this may be desirable for pedagogical purposes. For instance, cells 1 and 2 suggest that admirable human qualities are not restricted by race or environment and that there are different kinds of courage. Cell 2 suggests that significant human suffering occurs unexpectedly and is seldom recognized for what it is; or as Auden puts it, "even the dreadful martyrdom must run its course/ Anyhow in a corner, some untidy spot/Where the dogs go on with their doggy life and the torturer's horse/Scratches its innocent behind on a tree" (1945). It is difficult to make an exhaustive list, for the matrix encourages speculation. A list of meanings may have the advantage of explicitness, but a matrix has the advantage of relating the various meanings which can be derived from the story. It also has the advantage of suggestiveness. Although it is reductive, like any other method of analysis, it preserves some of the implicative qualities of the experienced work.

Further Applications

Matrix analysis appears to have considerable potential as a critical tool. In addition to its use in discovering and stating literary theme, it may also provide the critic and teacher with a way of exploring and explaining more precisely a number of ill-defined critical concepts. Lack of unity and lack of development, for example, might be discussed in terms of unrelated columns and rows and unfilled cells. And complexity, another concept intuitively grasped but difficult to explain, might be presented as the number of columns and rows necessary to describe the work, a one-by-two matrix constituting minimal complexity. (The matrix of Babel's story offers a basis for arguing that it is a unified, well-developed, but relatively simple story.) The ability of matrices to display units functioning simultaneously in two or more systems and to order like and different units by means of contrastive, interrelated categories suggests that it may also be a useful tool for investigating such important critical concepts as ambiguity, tension, and paradox.

Finally, matrix analysis may offer an approach to certain works which have resisted analysis by conventional means, such as Joyce's Ulysses, Pound's Cantos, and Eliot's Wasteland. As Joseph Frank pointed out, these works have spatial rather than temporal form, and understanding them requires "the simultaneous perception in space of word-groups which, when read consecutively in time, have no comprehensible relation to each other (1949, p. 321). In the

poems by Eliot and Pound, he argues,

> Syntactical sequence is given up for a structure depending on the perception of relationships between disconnected word-groups. To be properly understood, these word-groups must be juxtaposed with one another and perceived simultaneously; only when this is done can they be adequately understood; for while they follow one another in time, their meaning does not depend on this temporal relationship. The one difficulty of these poems, which no amount of textual exegesis can wholly overcome, is the internal conflict between the time-logic of language and the space-logic implicit in the modern conception of the nature of poetry (p. 321).

The burden of fusing the parts into a unified whole is shifted to the reader, who must by continual reflexive reference create a non-temporal semantic field within which the parts function.

Thus matrix analysis or, more precisely, a multi-systemic analysis in which units are ordered in sequence, class, and matrix seems to offer not only a powerful critical tool for investigating a wide range of literary problems but a means for making our insights and the process by which we achieved them more intelligible to others.

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Footnotes

[1]The research reported herein was performed in part pursuant to Contract OEC-3-061784-0508 with the U. S. Department of Health, Education, and Welfare, Office of Education, under the provisions of P. L. 83-531, Cooperative Research, and the provisions of Title VI, P. L. 85-864, as amended. This research report is one of several which have been submitted to the Office of Education as Studies in Language and Language Behavior, Progress Report No. VII, September 1, 1968.

[2]The term as used here refers to one kind of system within a particular literary work and not, as in Jost Trier's work, to "closely-knit sectors of the vocabulary, in which a particular sphere is divided up, classified and organized in such a way that each element helps to delimit its neighbors and is delimited by them." Ullmann, S. Semantics: An introduction to the science of meaning. New York: Barnes & Noble, 1964. P. 245.

[3]In The collected stories. W. Morison (Ed. & Trans.). New York: Criterion Books, 1955. Although a translation, the text is regarded in this discussion as a work of art in its own right.

[4]Quoted in Roman Jacobson, "Closing statement: Linguistics and poetics," in T. A. Sebeok (Ed.), Style in language. Cambridge, Mass.: MIT Press, 1968. P. 368.

[5]For an illustration of classification of low-level recurrent units, see Mark Schorer's "Fiction and the 'analogical matrix'" in J. W. Aldridge (Ed.), Critiques and essays on modern fiction: 1920-1951. New York: Ronald Press, 1952.

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